

### **ABSTRACT**

The present invention provides for systems and methods of dynamically controlling a cluster or grid environment. The method comprises attaching a trigger to an object and firing the trigger based on a trigger attribute. The cluster environment is modified by actions initiated when the trigger is fired. Each trigger has trigger attributes that govern when it is fired and actions it will take. The use of triggers enables a cluster environment to dynamically be modified with arbitrary actions to accommodate needs of arbitrary objects. Example objects include a compute node, compute resources, a cluster, groups of users, user credentials, jobs, resources managers, peer services and the like.